



## **lilliput**

*Toxolasma parvus*

Kingdom:           Animalia  
Division/Phylum: Mollusca  
Class:               Bivalvia

### **Features**

The shell of the lilliput mussel is small, oval or cylindrical, relatively solid, and “inflated.” The anterior and posterior ends are rounded. Several parallel ridges slope away from the dorsal margin in juveniles. The cloth-like surface of the shell is dark green, brown, or dark brown. The inside of the shell is silvery or bluish white and highly iridescent. Lilliputs may reach 1 1/2 inches long (most are less than one inch long).

### **Natural History**

The lilliput is found in ponds, lakes, and creeks to large rivers in mud, sand, or fine gravel. It is found in the backwaters of the Mississippi River. It is often overlooked due to its size and habitat. It is presumed to be found in the northeastern two-thirds of the state, but almost no surveys have been done of standing waters. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and

are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Hosts for this mussel include bluegill, green sunfish, orange-spotted sunfish, and white crappie. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. The lilliput may be hermaphroditic (have both male and female reproductive organs). Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

### **Habitats**

Mississippi River; constructed lakes, ponds, and reservoirs

### **Iowa Status**

common; native

### **Iowa Range**

Northeastern two-thirds of Iowa

### **Bibliography**

Iowa Department of Natural Resources. 2001.  
*Biodiversity of Iowa: Aquatic Habitats* CD-ROM.